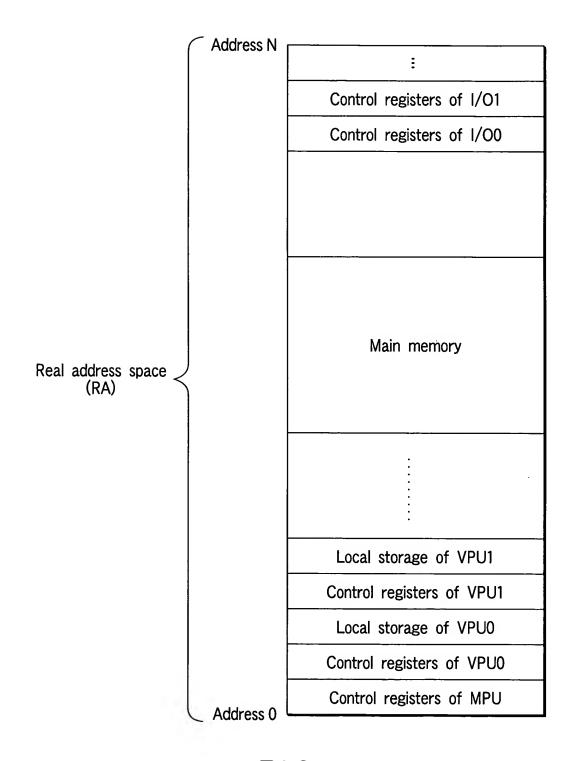
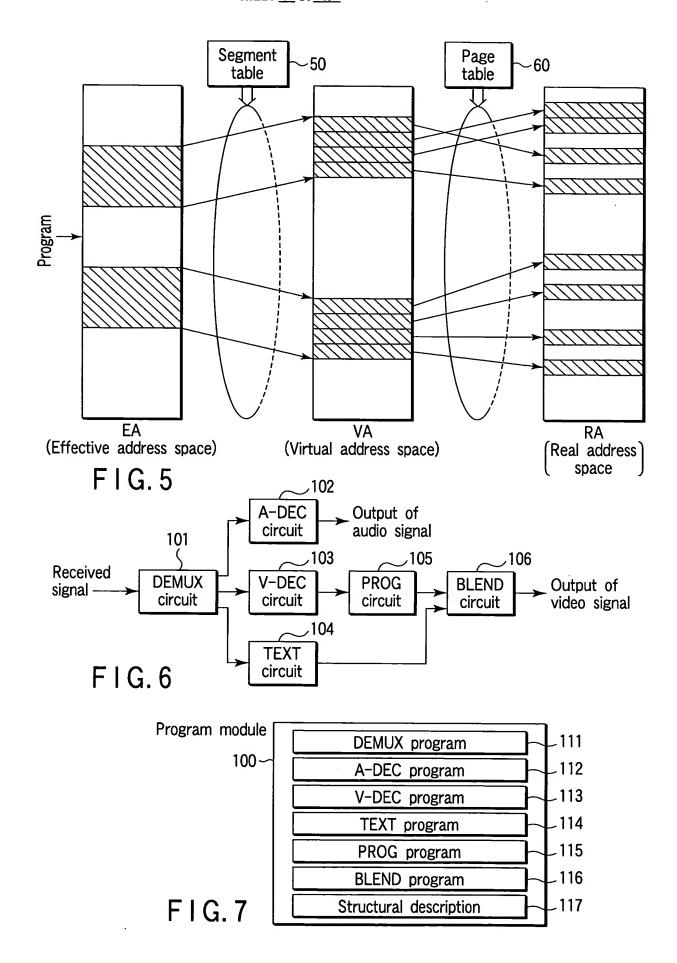


FIG.3



F I G. 4



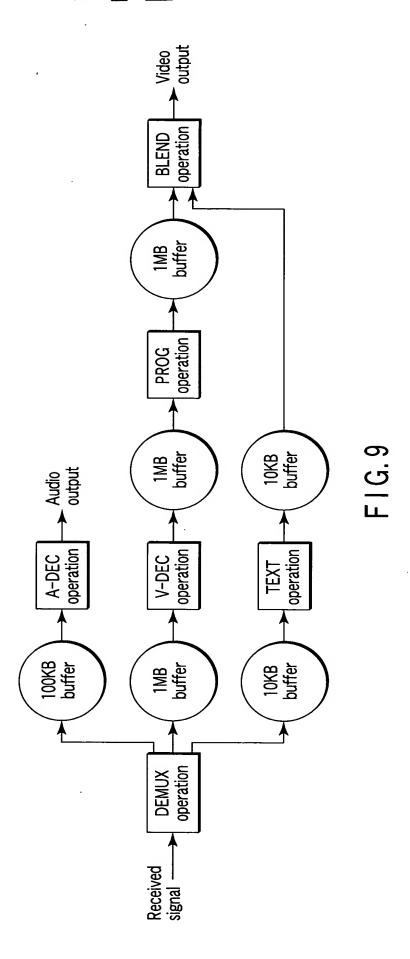
Structural description 117

Number	Program	Input	Output	Cost	Buffer
(1)	DEMUX	Received signal	(2)		100KB
		Sigilal	(3)	5	1MB
			(4)		10KB
(2)	A-DEC	(1)	Audio output	10	
(3)	V-DEC	(1)	(5)	50	1MB
(4)	TEXT	(1)	(6)	5	10KB
(5)	PROG	(3)	(6)	20	1MB
(6)	BLEND	(4) (5)	Video output	10	

Thread parameters

- Tightly coupled thread group : Loosely coupled thread group :

Others



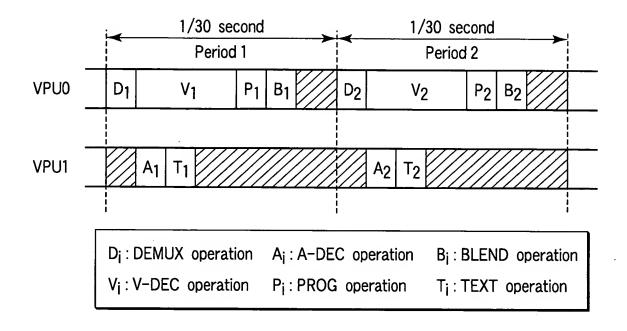


FIG. 10

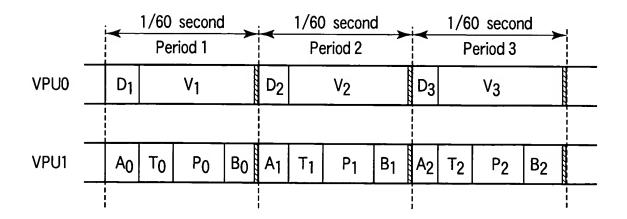


FIG. 11

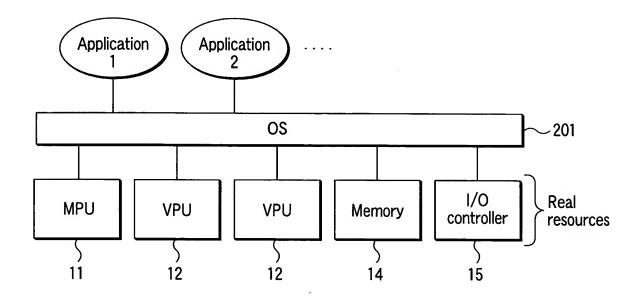


FIG. 12

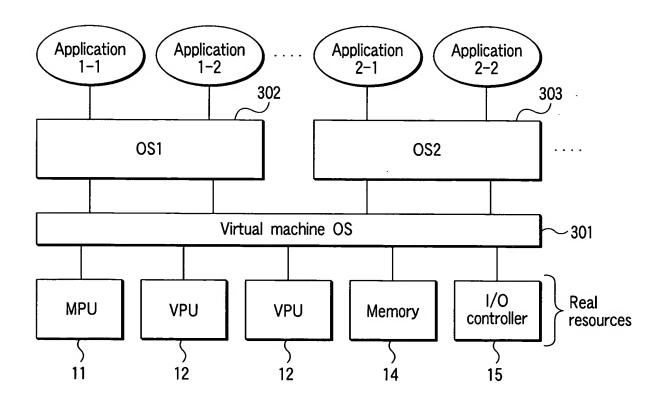
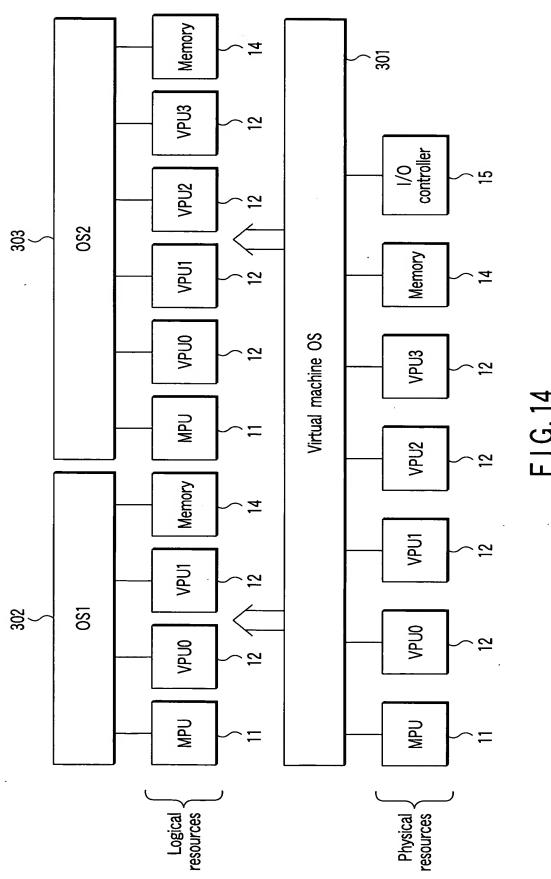


FIG. 13



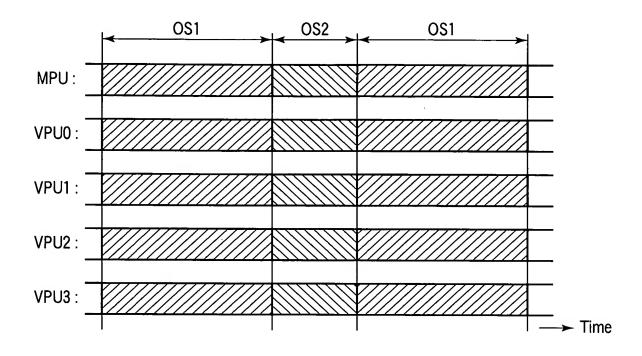


FIG. 15

VPU0: VPU2: VPU3: Exclusively for OS1

FIG. 16

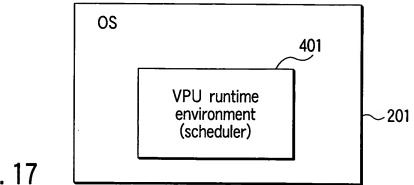
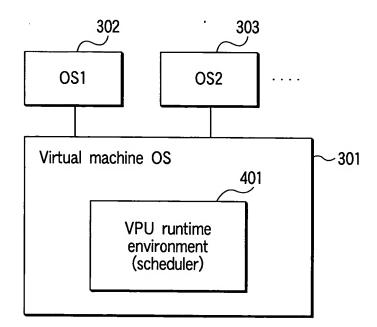
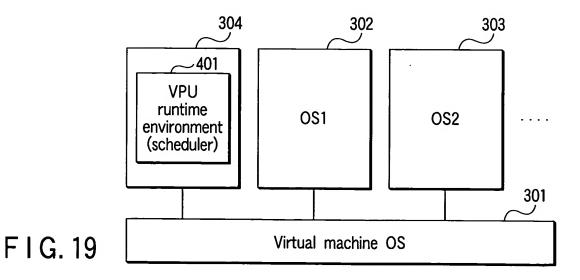


FIG. 17



F I G. 18



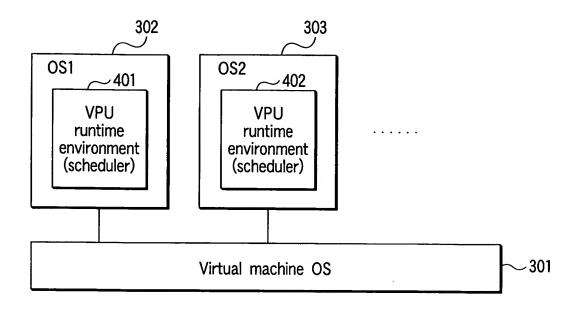


FIG. 20

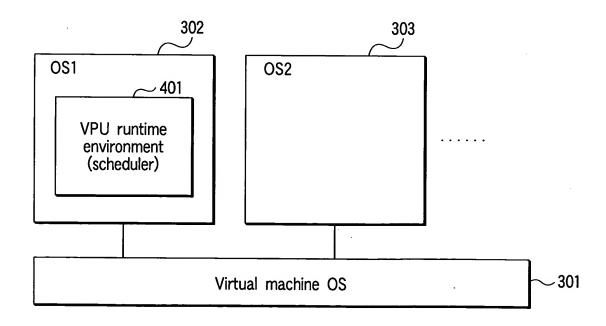
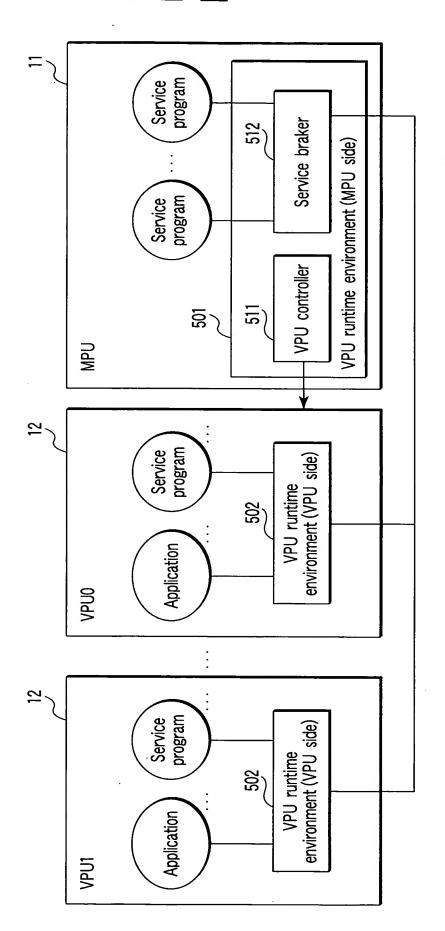
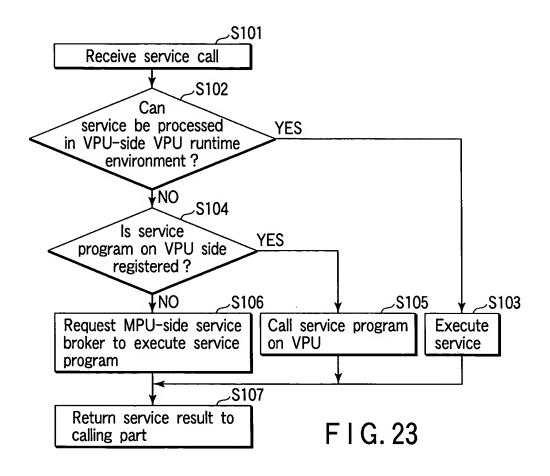
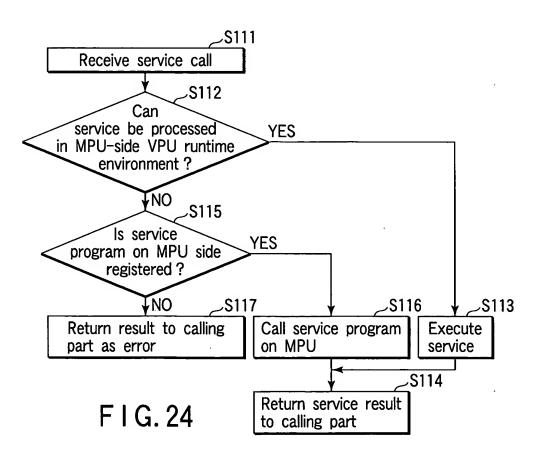


FIG. 21



F I G. 22





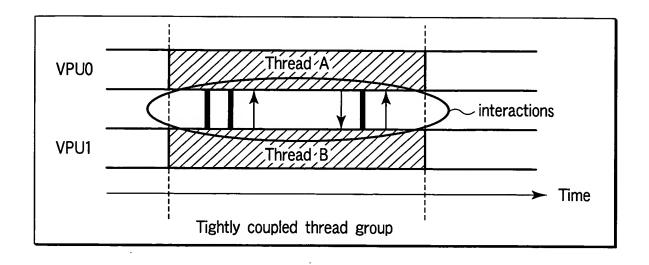
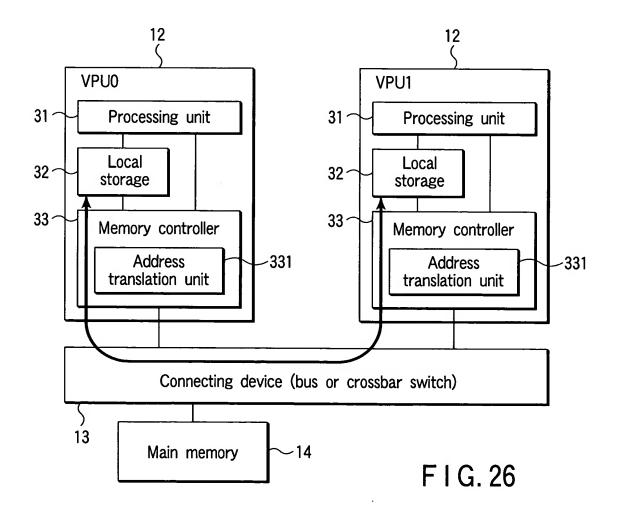


FIG. 25



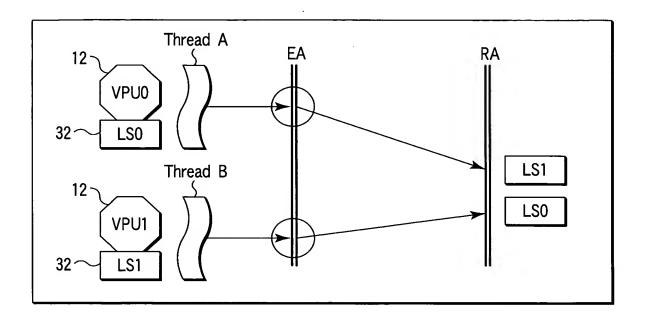


FIG. 27

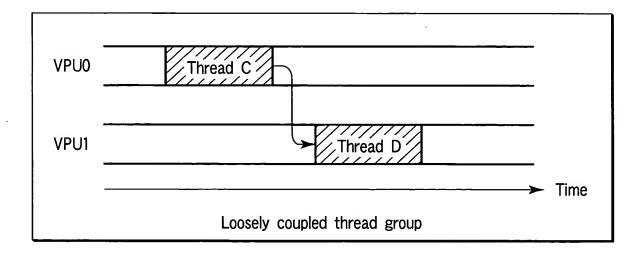


FIG. 28

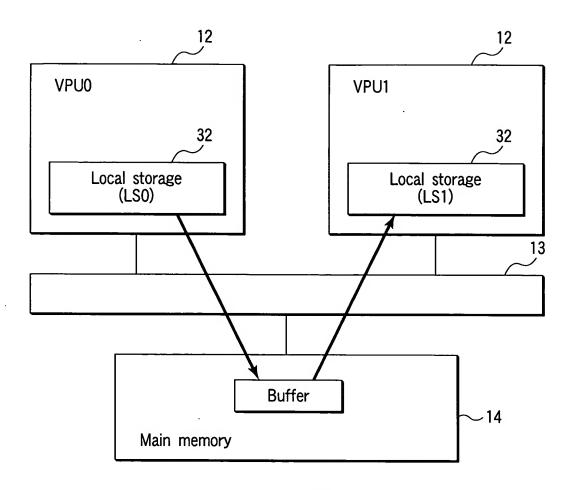
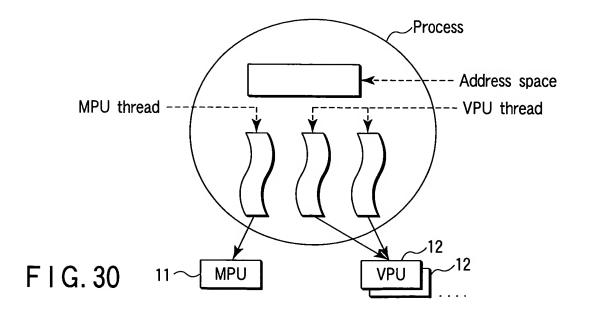
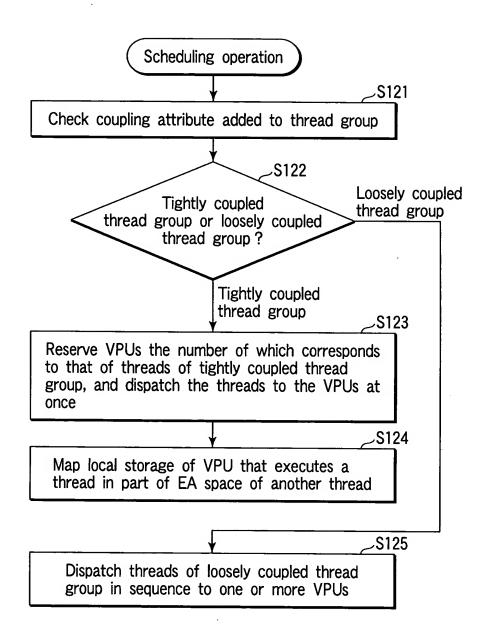


FIG. 29





F I G. 31

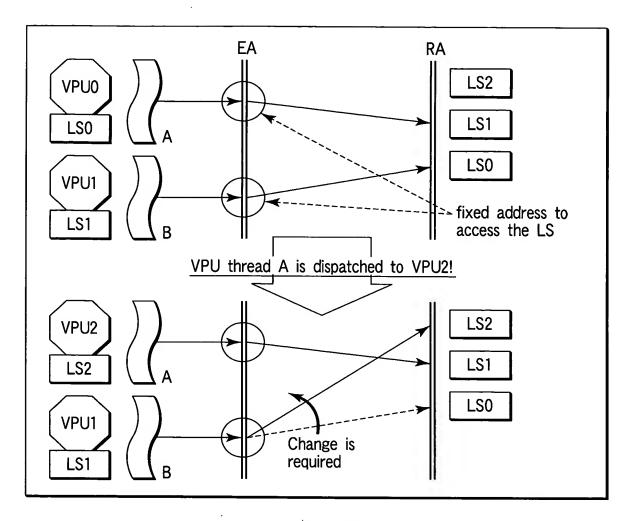


FIG. 32

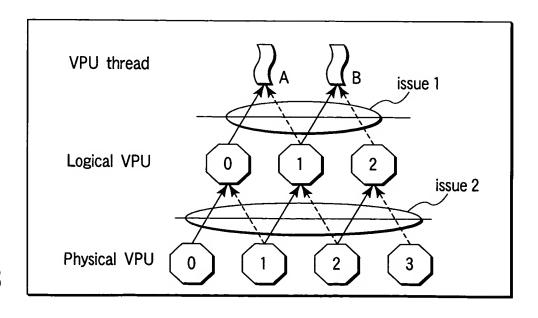


FIG. 33

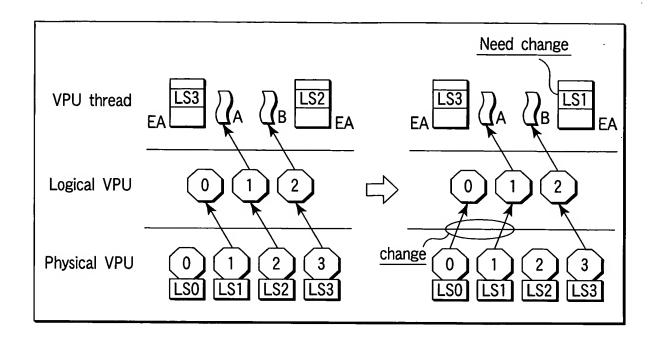


FIG. 34

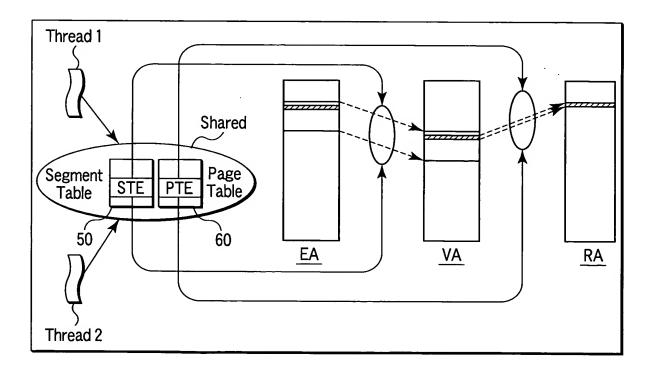


FIG. 35

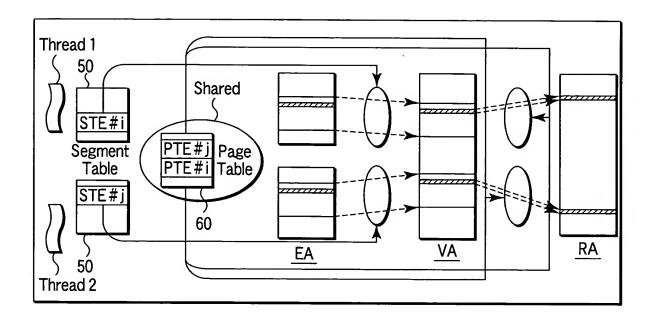


FIG. 36

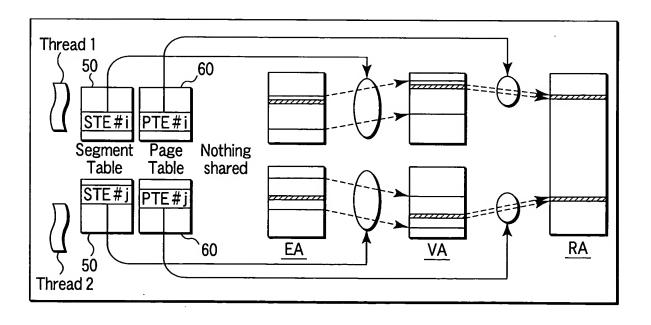
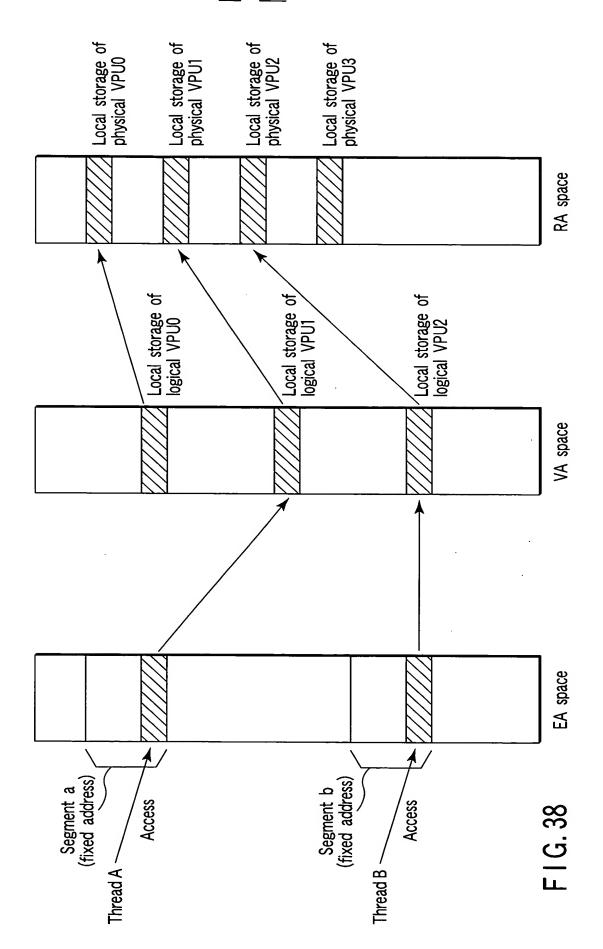
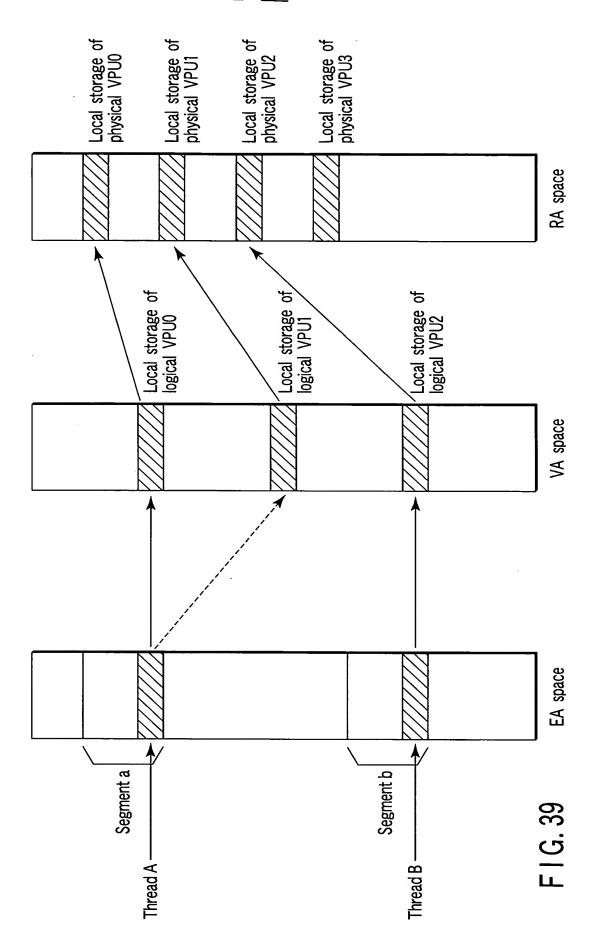
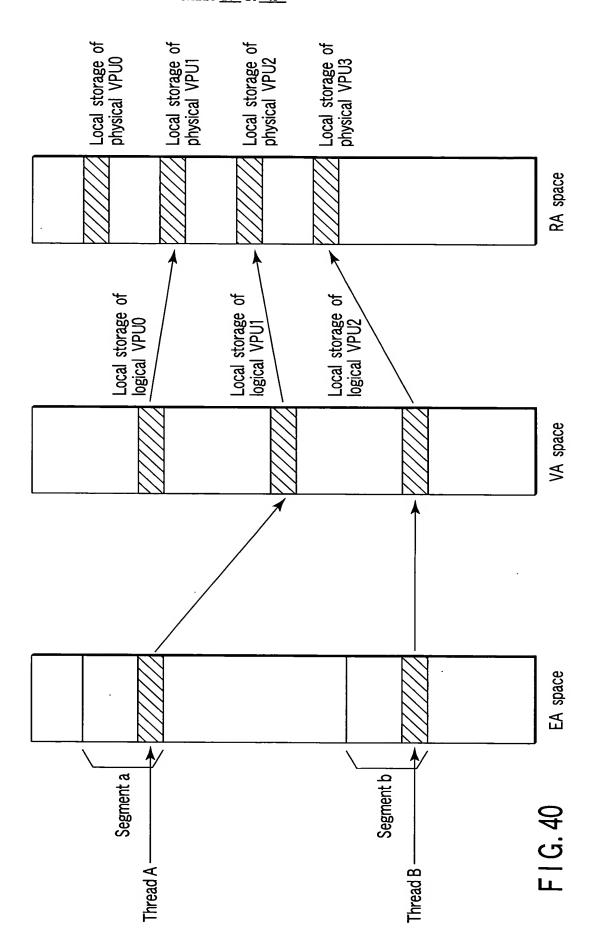
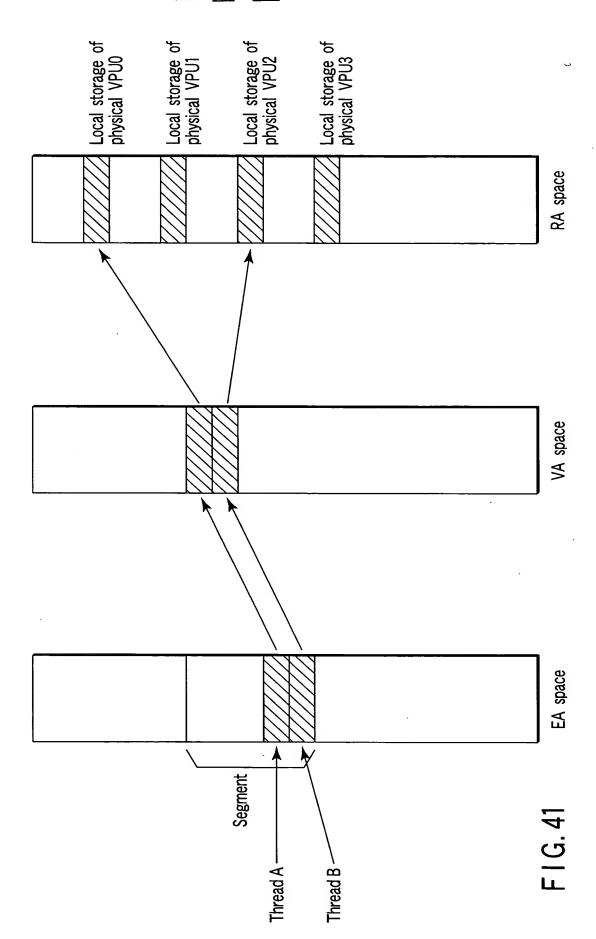


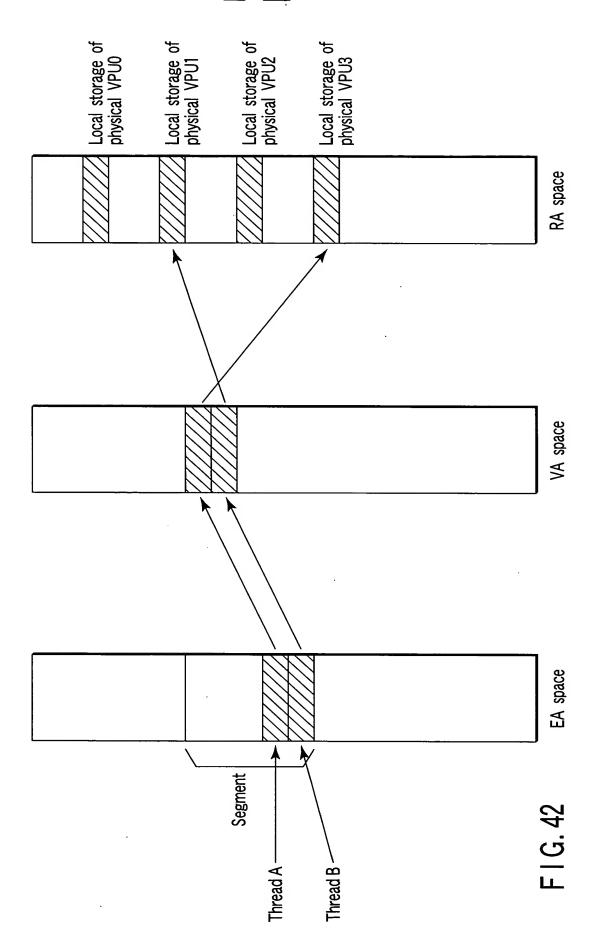
FIG. 37











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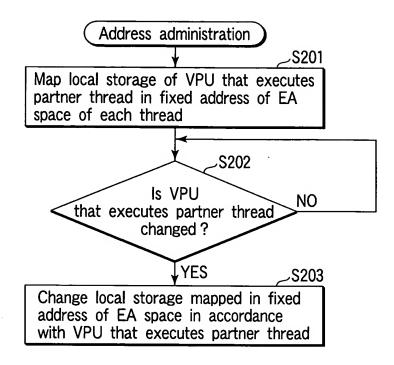


FIG. 43

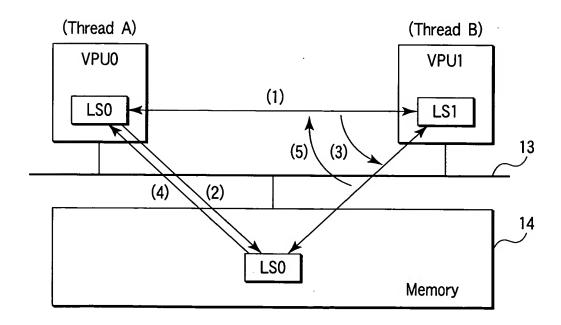


FIG. 44

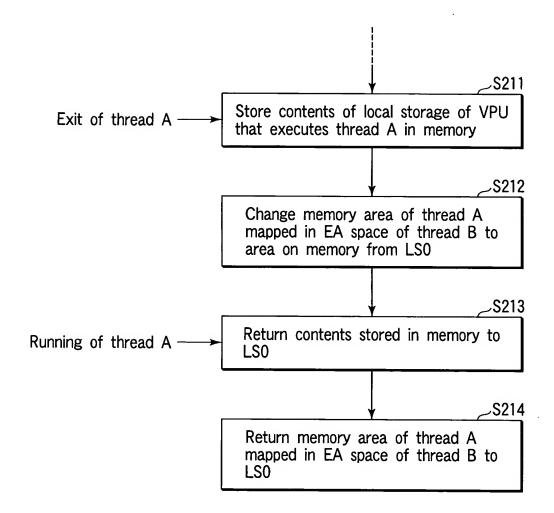
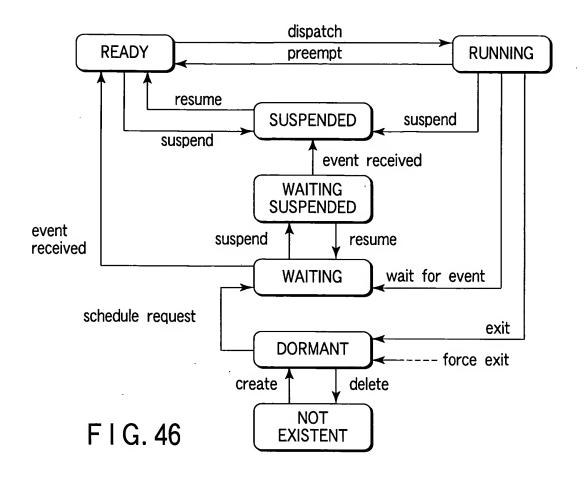
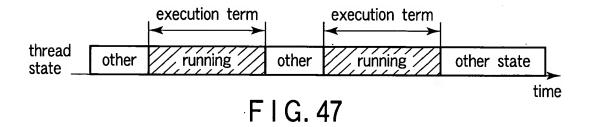
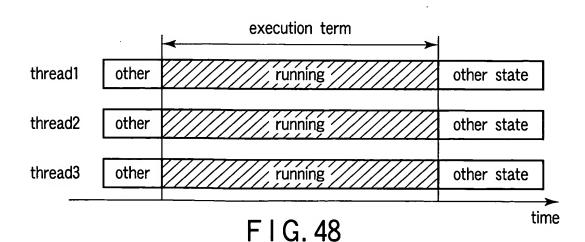


FIG. 45







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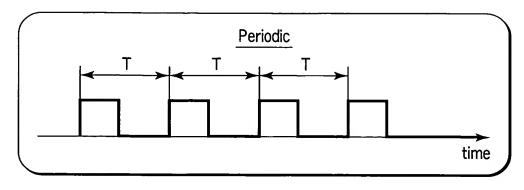


FIG. 49

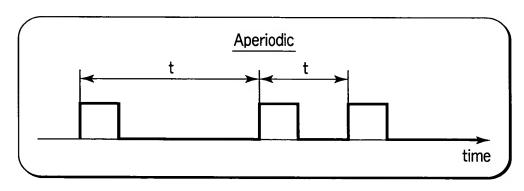
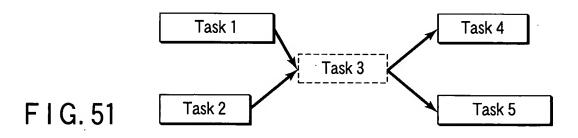


FIG. 50



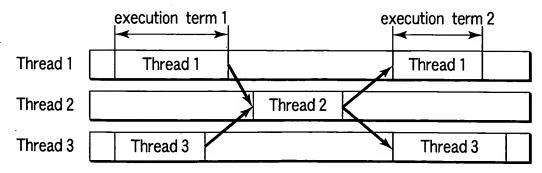
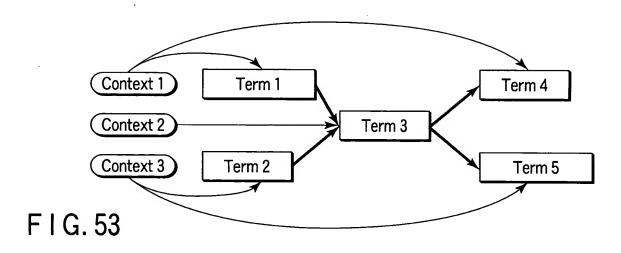
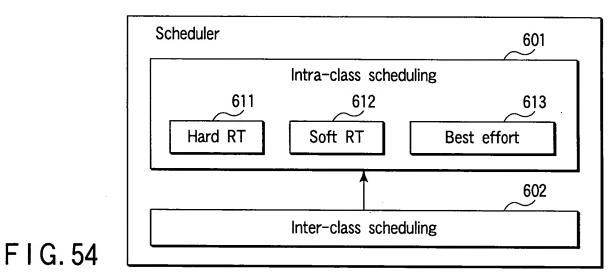


FIG. 52

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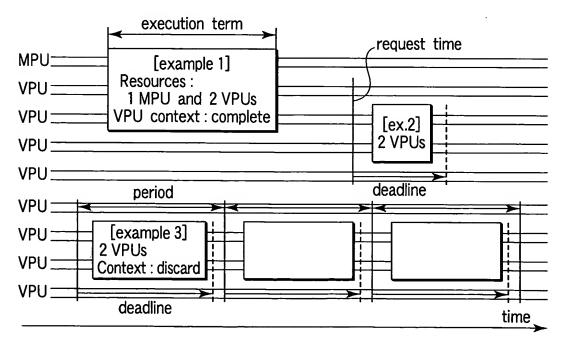
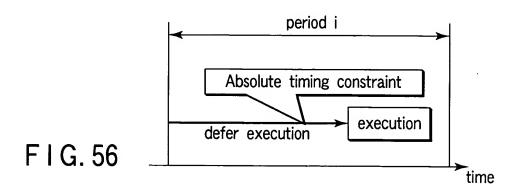
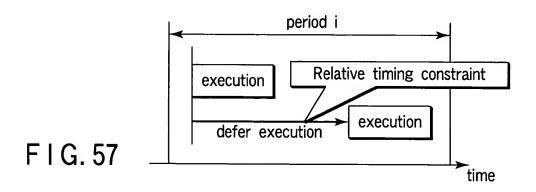


FIG. 55

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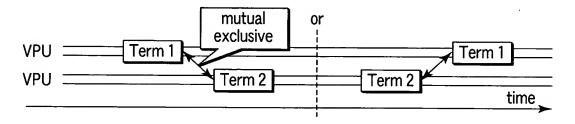
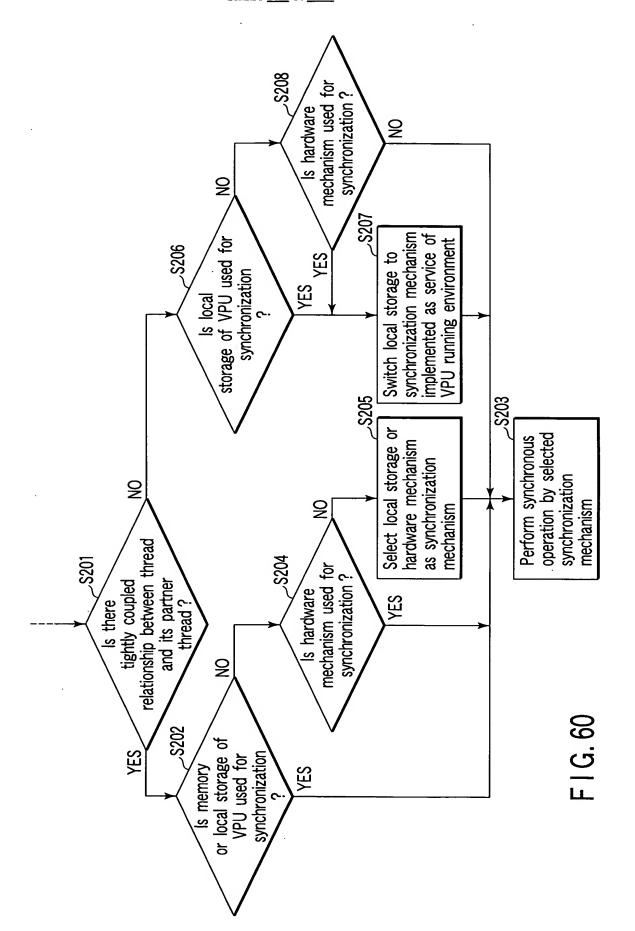
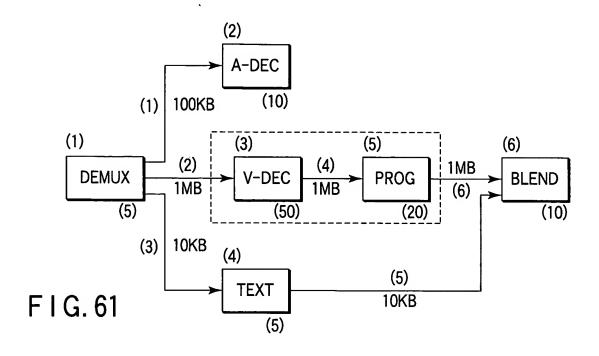


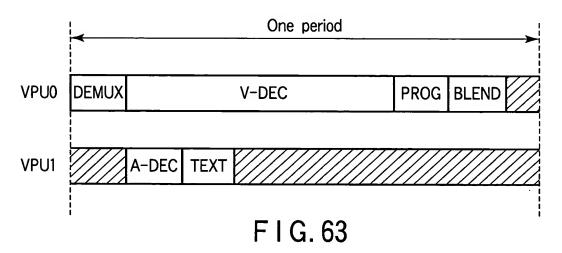
FIG. 58

		Tightly coupled thread group	Loosely coupled thread group	
On memory	LS	Can use	Cannot use	
	MS	Can use		
Oth	er	Should use hardware primitives	Should use mechanisms provided by VPU Runtime Environment	

FIG. 59







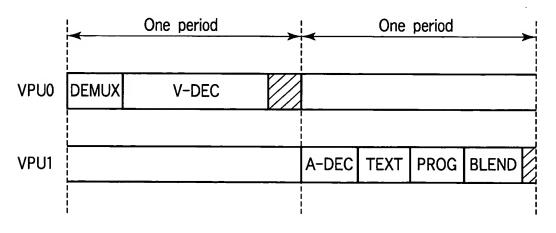


FIG. 64

BUFFER	ld : 1	
Size: 100KB	SrcTask: 1 DstTask: 2	
BUFFER	ld : 2	
Size: 1MB	SrcTask: 1 DstTask: 3	
BUFFER	ld : 3	
Size: 10KB	SrcTask: 1 DstTask: 4	
BUFFER	ld : 4	
Size : 1MB	SrcTask: 3 DstTask: 5	
BUFFER	ld : 5	
Size: 10KB	SrcTask: 4 DstTask: 6	
BUFFER	ld : 6	
Size : 1MB	SrcTask: 5 DstTask: 6	
TASK	ld: 1 Class: VPU,HRT	
Constraint : P	xt : DEMUX Cost : 5 recede : 2,3,4 OutputBuffer : 1,2,3	
TASK	ld: 2 Class: VPU,HRT	
ThreadConte	xt : A-DEC Cost : 10	
TASK	ld: 3 Class: VPU,HRT	
ThreadConte	xt : V-DEC Cost : 50 recede : 5	
•	2 OutputBuffer : 4	
TASK	ld: 4 Class: VPU,HRT	
ThreadConte: Constraint : P InputBuffer :		
TASK	ld: 5 Class: VPU,HRT	
ThreadConte Constraint : P InputBuffer :		
TASK	ld: 6 Class: VPU,HRT	
ThreadConte: Constraint : P InputBuffer :	xt : BLEND Cost : 10	

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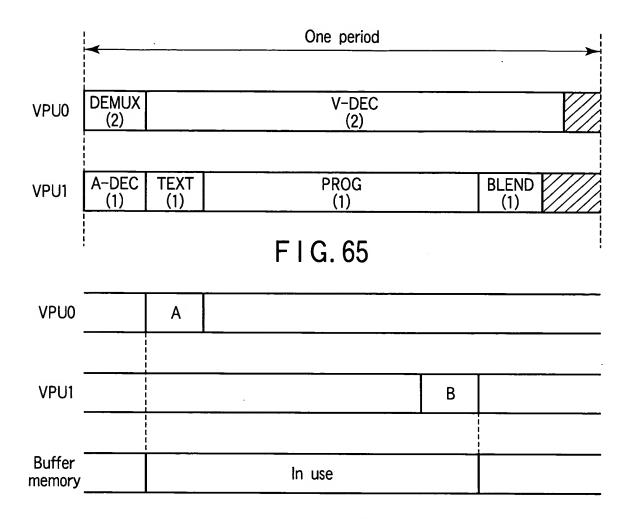


FIG. 66

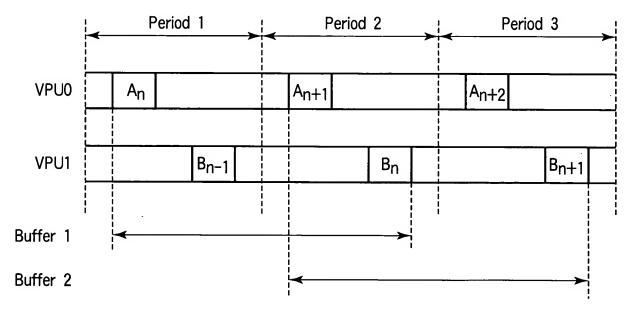


FIG. 67

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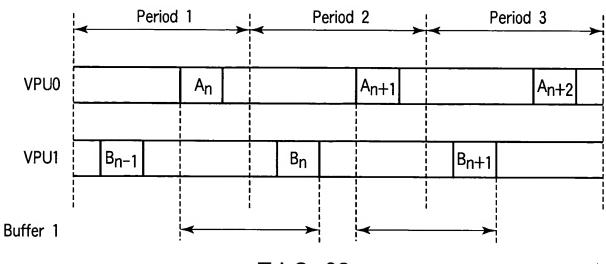


FIG. 68

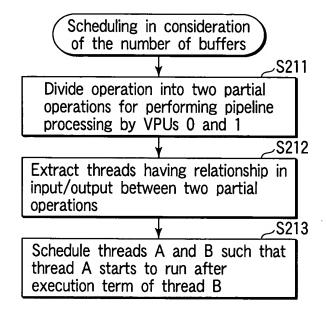


FIG. 69

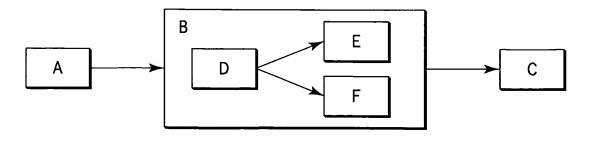
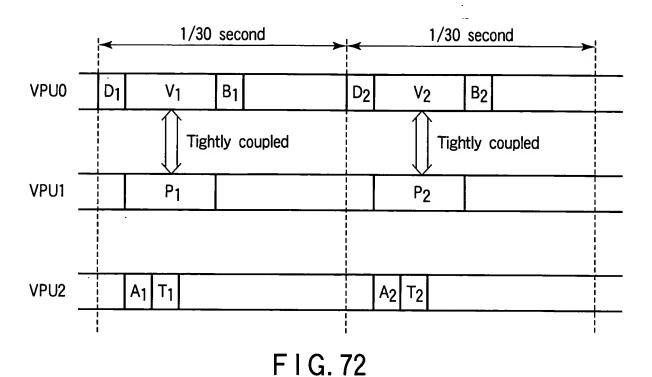


FIG. 70

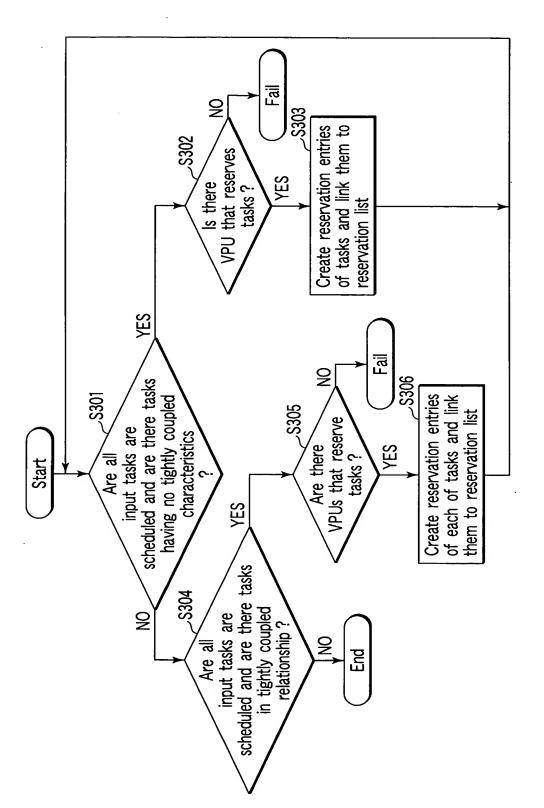
ld: 1 BUFFER Size: 100KB SrcTask: 1 DstTask: 2 ld: 2 BUFFER Size: 1MB SrcTask: 1 DstTask: 3 ld:3 **BUFFER** Size: 10KB SrcTask: 1 DstTask: 4 ld:4 **BUFFER** Size: 10KB SrcTask: 4 DstTask: 6 ld:5 **BUFFER** Size: 1MB SrcTask: 5 DstTask: 6 TASK ld:1 Class: VPU.HRT ThreadContext: DEMUX Cost: 5 Constraint: Precede: 2,3,4 InputBuffer: OutputBuffer: 1,2,3 **TASK** ld: 2 Class: VPU.HRT ThreadContext: A-DEC Cost: 10 Constraint : Precede : InputBuffer: 1 OutputBuffer: TASK ld:3 Class: VPU.HRT ThreadContext: V-DEC Cost: 50 Constraint: Precede: 5 TightlyCoupled: 5 InputBuffer: 2 OutputBuffer: **TASK** ld:4 Class: VPU.HRT ThreadContext: TEXT Cost: 5 Constraint: Precede: 6 InputBuffer: 3 OutputBuffer: 4 TASK ld:5 Class: VPU,HRT ThreadContext: PROG Cost : 50 Constraint: Precede: 6 TightlyCoupled: 3 InputBuffer: OutputBuffer: 5 TASK ld:6 Class: VPU,HRT ThreadContext: BLEND Cost: 10 Constraint: Precede: 5 InputBuffer: 4,5 OutputBuffer:

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Reservation Reservation Reservation Reservation Reservation list entry entry entry entry 0 5 55 75 VPU0 5 50 20 10 **PROG DEMUX V-DEC BLEND** VPU1 Reservation Reservation entry entry VPU2 5 15 10 5 VPU3 A-DEC **TEXT** Reservation entry Start time Execution term Running thread

FIG. 73



F1G.74